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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,052	11/17/2003	Rudolf Josef Moosburger	000470.00008	1134

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BANNER & WITCOFF, LTD.
1100 13th STREET, N.W.
SUITE 1200
WASHINGTON, DC 20005-4051

EXAMINER

PATEL, SHAMBHAVI K

ART UNIT	PAPER NUMBER
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2128

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/713,052	Applicant(s) MOOSBURGER ET AL.	
	Examiner Shambhavi Patel	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in reply to the Amendment/Remarks filed 08 January 2007.
2. Claims 1-53 are pending.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Response to Arguments

4. Applicant's arguments with respect to claims 1-53 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. **Claims 1-53 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter. The Examiner asserts that the current state of the claim language is such that a reasonable interpretation of the claims would not result in any useful, concrete or tangible product.

Claim 1 is directed to a system for providing a computer simulation system model. **Claim 16** is directed to a method of providing a computer simulation system model. **Claims 22 and 32** are directed to a tangible computer-readable medium having computer readable instructions stored thereon for performing a method of providing a computer simulation system model. **Claim 43** is directed to a system for providing a computer simulation system model comprising optical, opto-electronic, or electronic components. **Claim 47** is directed to a method for providing a computer simulation system model comprising optical, opto-electronic, or electronic components. **Claim 49** is directed to a tangible computer-readable medium having computer-readable instructions stored thereon for performing a method of providing a computer simulation system model. This claimed subject matter lacks a practical

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application of a judicial exception (law of nature, abstract idea, naturally occurring article/phenomenon) since it fails to produce a useful, concrete and tangible result. Specifically, the claimed subject matter does not produce a tangible result because the claimed subject matter fails to produce a result that is limited to having real world value rather than a result that may be interpreted to be abstract in nature as, for example, a thought, a computation, or manipulated data. More specifically, the claimed subject matter provides for running a simulation system model. This produced result remains in the abstract and, thus, fails to achieve the required status of having real world value.

All other claims are rejected by virtue of their dependency.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-6, 8-27 and 29-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reutters ("An Efficient Reuse System for Digital Circuit Design", 1998).

Regarding claims 1, 16, 22, 32, 43, 47, 49 and 53:

Reutter discloses a system for providing a computer simulation system model comprising:

- a. computer-implemented design automation means for enabling a designer to create a runnable simulation system model including interconnected components and subsystem models (section 2.2). Provided for the user is a parametrizable testbench, a test design, and parametrizable scripts for simulation and synthesis. The test design is a design environment with an example integration (which would include interconnections) of the IP.
- b. computer-implemented simulation content file creation means for creating a simulation content file that included information describing the simulation system model (section 2.2). Parametrizable scripts for simulation and synthesis are provided for the user is.
- c. a simulation player comprising means for running the simulation system model using the information in the simulation content file (section 4.1). Using the modules provided, the user can verify (i.e. simulate) the IP (which includes a parametrizable testbench, a test design, and parametrizable scripts for simulation and synthesis) before integrating the IP.
- d. wherein the means for running the simulation system model are adapted to prohibit the end-user from modifying the simulation model by adding or removing any of the component models, subsystem models, or interconnections of the simulation system model (section 4.1; section 3 5th paragraph). All IPs that are presented for selection

must be of a “checked” status. Once an IP has this status, “users” can no longer write to or change the data. End users can access the IP with “user” privileges, and thus the “user” is prohibited from modifying the IP design.

Regarding claim 16, Reutters discloses an end-system that runs the simulation and presenting the results to the user (section 4.1) so that the user may verify the IP before integrating it into their design.

Regarding claims 43, 47, 49 and 53, Reutters discloses a system model of electrical components (Introduction).

Reutters discloses providing simulation files and users that run these files (see above), but does not explicitly disclose a simulation player comprising GUI means for displaying to an end-user a schematic diagram of the simulation model created by the designer. However, the test design provided for the designer (a design environment with an example integration of the IP) and design descriptions would obviously include a schematic diagram of the model in order to allow the user to view how the IP is integrated into the system.

Regarding claims 2, 17, 23, 33, 44, 48, and 50:

Reutters discloses enabling the designer to identify parameters that may be varied and specify allowed values (section 2.2), and enabling the end user to vary only said identified parameters of the simulation model, component models and/or subsystem models to only said allowed values (section 2.2). The script files (created by the designer) support only realistic parameters (which would obviously be specified by the designer). Only certain designated parameters may be changed by the user. A GUI would obviously be used to allow the parameters to be changed (see definition of GUI in “Microsoft Computer Dictionary”).

Regarding claims 3, 18, 24 and 34:

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Reutters discloses a simulation content file further including information identifying said parameters and allowed values (section 2.2). **Reutters** does not explicitly disclose a GUI enabled to allow the end user to vary the parameters to only said allowed values. A skilled artisan would have obviously included this feature in the environment because all parameters have to meet the specification (a list of acceptable values) so that the design will operate within the tolerances (i.e. a minimum and maximum value).

Regarding claims 4 and 25:

Reutters discloses specifying the component models comprising the simulation model and the interconnections between them (section 2.2). The test design created by the designer is a design environment with an example integration (which would include interconnections) of the IP.

Regarding claims 5 and 26:

Reutters discloses specifying a sequence of operations to be carried out during running of the simulation model (section 2.2). Provided for the user is a parametrizable testbench, a test design, and parametrizable scripts for simulation and synthesis. These scripts provide instructions needed for simulating the model.

Regarding claims 6 and 35:

Reutters discloses providing simulation files and users that run these files (see rejection of claim 1), but does not explicitly disclose information defining a graphical representation of the simulation model which is utilized by the GUI to display the schematic diagram. However, the test design provided for the designer (a design environment with an example integration of the IP) and design descriptions

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would obviously include information on a graphical model and a schematic diagram of the model in order to allow the user to view how the IP is integrated into the system.

Regarding claims 8 and 27:

Reutters discloses supporting only realistic parameter values (section 2.2) but does not explicitly disclose allowed values of said parameters that comprise one or both of a range of values specified as a minimum value and a maximum value, and a list of discrete values. A skilled artisan would have obviously included this feature in the environment because all parameters have to meet the specification (a list of acceptable values) so that the design will operate within the tolerances (i.e. a minimum and maximum value).

Regarding claim 9:

Reutters discloses a software component for use with the computer-implemented design automation means (sections 2.2 and 4.1). The created software files can be used by the user for simulation and verification.

Regarding claims 10, 30, 37, 39, 45 and 51:

Reutters discloses including data and/or document files and wherein the designer is able to control the content file creation software component to include said content at time of creation of the file (section 2.2). A file containing a description of the functionality of the component is created by the designer and included with the IP.

Regarding claims 11, 31 and 38:

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Reutters discloses providing the model for distribution by a vendor for evaluation of said product by prospective customers (figure 6). Users can upload their created IPs, which can then be downloaded by other users for reuse.

Regarding claim 12:

Reutters discloses data information relating to said product (section 2.2 functionality description) and allowing the user to open said files and inspect their contents (section 4.1). Users can read the contents of the files they download.

Regarding claims 13, 15, 40, and 42:

Reutters does not explicitly disclose a digital image comprising a company logo of said vendor, and the simulation player software product is able in use to display the logo on a computer display, and wherein the contact details include one or more of a physical address, an email address, a telephone number and a fax number, and the simulation player software product is able in use to display said contact details on a computer display. It would be obvious to include a company logo and contact information such as a telephone number so that the user may recognize what company makes the IP component they wish to purchase and determine how to contact the vendor.

Regarding claims 14 and 41:

Reutters discloses a web site URL that identifies a web site of said vendor, and the simulation player software product enables the end user to open a web browser at said web site (Introduction: Internet based IP catalog).

Regarding claims 19 and 20:

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Reutters discloses providing simulation content files by distributing the file using an information network and the Internet (Introduction 2nd paragraph).

Regarding claim 21:

Reutters discloses downloading the content file from a website (Introduction).

Regarding claim 29:

Reutters discloses the computer program product of claim 22 wherein the step of creating the simulation content file is performed by a software component forming an element of the simulation player software environment (sections 2.2 and 4.1).

Regarding claim 36:

Reutters discloses the computer program product of claim 32 wherein the step of reading the simulation content file is performed by a software component forming an element of the simulation player software environment (sections 2.2 and 4.1).

Regarding claims 46 and 52:

Reutters discloses the system of claim 45 and the product of claim 51 wherein:

- a. **simulation model comprises a model of an electronic component or system product (Introduction) and the computer simulation model is provided for distribution by a vendor for evaluation of said product by prospective customers (figure 6). Users can upload their created IPs, which can then be downloaded by other users for reuse.**

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- b. the document and/or data files comprise data information relating to said product (section 2.2 functionality description) and allowing the user to open said files and inspect their contents (section 4.1). Users can read the contents of the files they download
- c. the web site URL identifies a web site of said vendor, and the simulation player software product enables the end user to open a web browser at said web site (**Introduction: Internet based IP**).

Reutters does explicitly not disclose the system of claim 11 wherein the digital image comprises a company logo of said vendor, and the simulation player software product is able in use to display the logo on a computer display, and wherein the contact details include one or more of a physical address, an email address, a telephone number and a fax number, and the simulation player software product is able in use to display said contact details on a computer display. It would be obvious to include a company logo and contact information such as a telephone number so that the user may recognize what company makes the IP component they wish to purchase and determine how to contact the vendor.

7. Claim(s) 7 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reutters ("An Efficient Reuse System for Digital Circuit Design", 1998) in view of Huack ('Data Security for Web-based CAD').

Regarding claims 7 and 28:

Reutters does not explicitly disclose creating the simulation content file creation by encrypting at least a part of the simulation content file to prevent unauthorized parties from accessing and/or altering the information describing the simulation model. Huack teaches providing security for Web-based CAD through encryption (Huack: sections 3.1, 3.8, 4, and 5). At the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teachings of Reutters and Huack because the

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encryption technique taught by Huack is the key to the development of future Internet-based CAD systems, since serious CAD users will be unwilling to use any CAD methodology that risks exposing their designs to outsiders (Huack: abstract).

Examiner's Remarks

8. Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

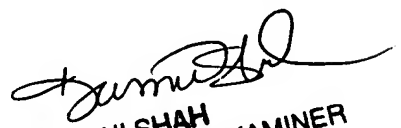
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shambhavi Patel whose telephone number is (571) 272-5877. The examiner can normally be reached on Monday-Friday, 8:00 am – 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571) 272-2279. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SKP


KAMINI SHAH
SUPERVISOR PATENT EXAMINER